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United States Patent [19][11] **Patent Number:** **5,948,040****DeLorme et al.**[45] **Date of Patent:** **Sep. 7, 1999****[54] TRAVEL RESERVATION INFORMATION AND PLANNING SYSTEM****[75] Inventors:** **David M. DeLorme**, Yarmouth; **Keith A. Gray**, Dresden; **T. Angus Ferguson**, Portland, all of Me.**[73] Assignee:** **DeLorme Publishing Co.**, Yarmouth, Me.**[21] Appl. No.:** **08/797,471****[22] Filed:** **Feb. 6, 1997****Related U.S. Application Data****[63]** Continuation-in-part of application No. 08/661,600, Jun. 11, 1996, Pat. No. 5,802,492, which is a continuation-in-part of application No. 08/381,214, Jan. 31, 1995, Pat. No. 5,559,707, which is a continuation-in-part of application No. 08/265,327, Jun. 24, 1994, and a continuation-in-part of application No. 08/521,828, Aug. 31, 1995.**[51] Int. Cl.⁶** **G06F 19/00; G01C 21/00****[52] U.S. Cl.** **701/201; 701/208; 701/211; 340/990; 705/5****[58] Field of Search** **701/201, 202, 701/207, 208, 209, 211, 212, 213; 705/5, 6; 340/988, 989, 990, 995****[56] References Cited****U.S. PATENT DOCUMENTS**

4,359,631	11/1982	Lockwood et al.	360/12
4,862,357	8/1989	Ahlstrom et al.	705/6
4,926,336	5/1990	Yamada	364/444
5,021,953	6/1991	Webber et al.	705/6
5,172,321	12/1992	Ghaem et al.	701/202
5,191,523	3/1993	Whitesage	705/6
5,208,756	5/1993	Song	364/449

(List continued on next page.)

OTHER PUBLICATIONS

Makulowich, John, "Traveling by Virtual Reservation," Washington Technology, Jan. 23, 1997, p. 42.

Knecht, Bruce, G., "Microsoft Puts Newspapers in Highanxiety.com," The Wall Street Journal, Jul. 15, 1996, pp. B1, B10.

"InforTravel Expands Service," Business Geographics, vol. 4, No. 6, Jun., 1996, p. 13.

DelRosso, Laura, "Firm Customizes Internet Res Link," Travel Weekly, vol. 55, No. 26, Apr. 1, 1996, pp. 43-44, 47.

"Casto Travel's Resource Library," www.casto.com.

"Sunnyside Computing, Inc.," www.itn.net.

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Computerized travel reservation information and planning system that generates "map ticket" output in various media, for guidance and transactions en route. Such print or electronic documents can include bar or alphanumeric codes for automated recognition and/or access. WHERE?, WHO/WHAT?, WHEN? and HOW? menus enable flexible user inquiries accessing selectable geographic, topical, temporal and transactional data records and relational processing. Sub-menus provide further capabilities: e.g. routing, topical searching; searches of events calendars, almanacs, appointment books, related itinerary scheduling; trip budgeting issues, plus travel arrangement availabilities or other goods/services offers. Online communications links access updated or supplemental information on places, times, topics and other provider goods/service offers. Online computer-aided routing system enables input of selectable travel origin, destination, and waypoints to compute travel routes, available transportation services, costs, options, and schedules. A point-of-interest database lets users pick types of attractions or accommodations within a user-selected region around routes of travel. Users engage in an iterative planning process, revising or editing travel plans, previewing travel-logs of alternate routes, selecting point of interest parameters, comparing times and costs of transportation options, in order to achieve a satisfactory travel plan. The system provides printed or electronic output that may include any one or more of text itinerary, ordered set of travel maps, customized collection of information on points of interest information and a selected array of valid reservation confirmations, tickets and/or discount coupons coded with elements for automated recognition and processing. Mobile users, including GPS-linked users, can access the system via wireless communication units.

80 Claims, 14 Drawing Sheets